ABSTRACT Of THE DISCLOSURE

A method and apparatus for reducing chronic pain in animals by radio frequency (RF) neuromodulation of peripheral nerves of the animal is disclosed. The method, using the disclosed apparatus, comprises the steps of attaching active and dispersive percutaneous probes at respective active and dispersive locations relative to a peripheral nerve of the patient associated with the pain to be reduced; generating a first pulsed RF signal for coupling to the active and dispersive probes to verify the location of the peripheral nerve; and generating a second pulsed RF signal for coupling to the active and dispersive probes to modify propagation of pain sensation in the peripheral nerve without ablation thereof. In one embodiment of the apparatus, the active percutaneous probe includes an RF cannula having a conductive spatulate blade conformably attached to a dorsal side of a curved, blunt-ended tubular tip portion of the RF cannula. In another embodiment of the apparatus, a dispersive percutaneous probe includes a pair of 22 gauge needles connected to ground return conductors. In yet another embodiment of the apparatus, a pulsed RF generator is modified to provide specific outputs adapted to the neuromodulation of peripheral nerves in veterinary patients.